IN THE CLAIMS

Please amend the Claims 1, 3, 9, 10, 12, 16, 18 and 20, and add new Claim 21, as follows.

Claim 1 (Currently Amended): A secure access card comprising:

at least one tone generator for generating at least one tone signal that is variable in at least one of tone frequency, time duration of tone, time duration of space between tones, and by amplitude of tone, and wherein the at least one tone generator comprises ~~at least one~~ a plurality of acoustic transducer~~s~~ that ~~is~~ are mechanically tuned to oscillate about ~~its~~ their mechanical resonant frequency to substantially maximize audio power output from the at least one tone generator;

input means for accepting input from a user; and

a controller, electrically coupled to the at least one tone generator and the input means, for controlling the at least one tone generator to generate a tone sequence corresponding to the input from the user, the tone sequence for delivery via a communication network interface.

Claim 2 (Original): The secure access card according to claim 1, wherein the at least one tone generator generates a tone sequence comprising at least one of dual tone multi-frequency (DTMF) signals, FSK signals, MSK signals, and multitone signals, to identify the user as an authorized user.

21026.09   - 4 of 28   09/468,621

Claim 3 (Currently Amended): The secure access card according to claim 1, wherein the at least one tone generator further comprises a controllable amplifier circuit, the controller being electrically coupled to the controllable amplifier circuit and to the ~~at least one~~ plurality of acoustic transducers to selectively control the controllable amplifier circuit and the ~~at least one~~ plurality of acoustic transducers to generate the tone sequence corresponding to the input from the user.

Claim 4 (Original): The secure access card according to claim 1, wherein the at least one tone generator generates a tone sequence that is delivered via a communication network interface comprising a telephone network interface for a publicly switched telephone network (PSTN).

Claim 5 (Original): The secure access card according to claim 1, further comprising a memory for storing identification information, and wherein the controller is electrically coupled to the memory and to the input means for monitoring the input means for user input and to determine whether the user input matches the stored identification information to permit the card to generate the tone sequence for delivery via the communication network interface.

Claim 6 (Original): The secure access card according to claim 5, wherein the input means comprises at least one of a key input, a voice audio input, a signature input, and a fingerprint input, to capture user input from a user of the secure access card, the user input being compared to the stored identification information to permit the card to generate the tone sequence for delivery via the communication network interface.

Claim 7 (Original): The secure access card according to claim 1, further comprising a memory for storing a representation of user input, and wherein the controller is electrically coupled to the memory and to the input means for monitoring the input means for user input and to store a representation of the user input in the memory, the controller controlling the at least one tone generator to generate a tone sequence corresponding to the stored representation of the user input, the tone sequence for delivery via a communication network interface to a secure access server to determine whether the user input identifies the user as an authorized user of secure access function of a system.

21026.09   - 6 of 28   09/468,621

Claim 8 (Original): The secure access card according to claim 7, wherein the input means comprises at least one of a key input, a voice audio input, a signature input, and a fingerprint input, to capture user input from a user of the secure access card and to store a representation of the user input in the memory, the controller controlling the at least one tone generator to generate a tone sequence corresponding to the stored representation of the user input for delivery via a communication network interface to a secure access server to determine whether the user input identifies the user as an authorized user of secure access function of a system.

Claim 9 (Currently Amended): The secure access card according to claim 8 7, wherein the tone sequence comprises a representation of the captured at least one of a key input, a voice audio input, a signature input, and a fingerprint input from a user of the secure access card to identify the user thereof.

Claim 10 (Currently Amended): A communication system comprising:

a communication network;

a secure application/function server, electrically coupled to the communication network, for providing secured access functions to an authorized user across the communication network;

a secure access server, electrically coupled to the communication network, for determining whether a user across the communication network is an authorized user, the secure access server including:

a network interface for coupling communication signaling between the communication network and the secure access server;

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a tone signal processor electrically coupled to the network interface for receiving and processing communication signaling from the communication network, the communication signaling comprising at least one tone signal in a tone sequence;

a database memory for storing authorized user identification information including for each authorized user at least one of a personal identification number (PIN), a voice identification information, a fingerprint identification information, and a signature identification information; and

a controller, electrically coupled to the tone signal processor and the database memory, for receiving communication signaling from the communication network, the communication signaling comprising at least one tone signal in a tone sequence representative of user identification information, and for comparing the user identification information to the stored authorized user identification information to determine whether the user identification information received from across the

21026.09   - 8 of 28   09/468,621

communication network corresponds to an authorized user for accessing secured access functions provided by the secure application/function server to an authorized user across the communication network; and

a secure access card including:

at least one tone generator for generating at least one tone signal that is variable in at least one of tone frequency, time duration of tone, time duration of space between tones, and by amplitude of tone, and wherein the at least one tone generator comprises at least one a plurality of acoustic transducers that is are mechanically tuned to oscillate about its their mechanical resonant frequency to substantially maximize audio power output from the at least one tone generator;

input means for accepting input from a user; and

a controller, electrically coupled to the at least one tone generator and the input means, for controlling the at least one tone generator to generate a tone sequence corresponding to the input from the user and providing user identification information, the tone sequence for delivery via the communication network to the secure access server to identify the user as an authorized user for accessing secured access functions provided by the secure application/function server to the authorized user across the communication network.

Claim 11 (Original): The secure access card according to claim 10, wherein the at least one tone generator generates a tone sequence comprising dual tone multi-frequency (DTMF) signals to identify the user as an authorized user.

Claim 12 (Currently Amended): The secure access card according to claim 10, wherein the at least one tone generator further comprises a controllable amplifier circuit, the controller being electrically coupled to the controllable amplifier circuit and to the at least-one plurality of acoustic transducers to selectively control the controllable amplifier circuit and the at-least-one plurality of acoustic transducers to generate the tone sequence corresponding to the input from the user.

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Claim 13 (Original): The secure access card according to claim 10, wherein the at least one tone generator generates a tone sequence that is delivered via the communication network comprising a publicly switched telephone network (PSTN).

Claim 14 (Original): The secure access card according to claim 10, further comprising a memory for storing identification information, and wherein the controller is electrically coupled to the memory and to the input means for monitoring the input means for user input and to determine whether the user input matches the stored identification information to permit the card to generate the tone sequence for delivery via the communication network interface.

Claim 15 (Original): The secure access card according to claim 14, wherein the input means comprises at least one of a key input, a voice audio input, a signature input, and a fingerprint input, to capture user input from a user of the secure access card, the user input being compared to the stored identification information to permit the card to generate the tone sequence for delivery via the communication network interface.

Claim 16 (Currently Amended): The secure access card according to claim 10, further comprising a memory for storing a representation of user input, and wherein the controller is electrically coupled to the memory and to the input means for monitoring the input means for user input and to store a representation of the user input in the memory, the controller controlling the at least one tone generator to generate a tone sequence corresponding to the stored representation of the user input, the tone sequence for delivery via the communication network to the secure access server to determine whether the user input identifies the user as an authorized user of secure access function of a system.

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21026.09   - 11 of 28   09/468,621

Claim 17 (Original): The secure access card according to claim 16, wherein the input means comprises at least one of a key input, a voice audio input, a signature input, and a fingerprint input, to capture user input from a user of the secure access card and to store a representation of the user input in the memory, the controller controlling the at least one tone generator to generate a tone sequence corresponding to the stored representation of the user input for delivery via the communication network to the secure access server to determine whether the user input identifies the user as an authorized user.

Claim 18 (Currently Amended): A method for a communication system comprising the steps of:

capturing user input at a secure access device card;

storing a representation of the user input at the secure access device card;

acoustically transmitting by at least one tone generator in the device , from the card, a tone sequence destined for reception across a communication network, the tone sequence corresponding to the stored representation of the user input, wherein the at least one tone generator comprises at least one acoustic transducer that is mechanically tuned to oscillate about its mechanical resonant frequency to substantially maximize audio power output from the at least one tone generator;

receiving from across the communication network a representation of the transmitted tone sequence;

comparing the received representation of the transmitted tone sequence to pre-stored authorized user identification information; and

determining whether a match between the representation of the transmitted tone sequence and a pre-stored authorized user identification information identifies the user of the secure access device card as an authorized user of the communication system.

Claim 19 (Currently Amended): The method of claim 18, wherein the step of capturing user input at a secure access device card comprises the step of:

capturing at least one of a key input, a voice audio input, a signature input, and a fingerprint input, to capture user input from a user of the secure access device card.

21026.09   - 13 of 28   09/468,621

Claim 20 (Currently Amended): The method of claim ~~19~~ 18, wherein the tone sequence

comprises a representation of the captured at least one of a key input, a voice audio

input, a signature input, and a fingerprint input from a user of the secure access device

~~card~~ to identify the user thereof.

Claim 21 (new): A secure access device comprising:

at least one tone generator for generating at least one tone signal that is variable

in at least one of tone frequency, time duration of tone, time duration of space between

tones, and by amplitude of tone, and wherein the at least one tone generator comprises

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at least one acoustic transducer being mechanically tuned to oscillate substantially at its

mechanical resonant frequency to substantially maximize audio power output from the

at least one tone generator;

input means for accepting input from a user; and

a controller, electrically coupled to the at least one tone generator and the input

means, for controlling the at least one tone generator to generate a tone sequence

corresponding to the input from the user, the tone sequence for delivery via a

communication network interface.

21026.09   - 14 of 28   09/468,621